

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An arc welding control unit comprising a heat radiating unit built in a box body of the arc welding control unit for discharging air heated by a heat generating first electrical element to an outside of the arc welding control unit, wherein the heat radiating unit has a tunnel shape including an outer peripheral portion for defining a cavity portion allowing air to flow therethrough,

wherein the heat radiating unit includes two or more rows of cavity portions, the cavity portions being separated by one or more dividers such that the cavity portions are separated into substantially individualized compartments, and

wherein respective heat generating electrical elements are cooled by the air flow in each of the individualized compartments.

Claim 2 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the heat radiating unit has a substantially cuboid shape including a side surface portion and a top surface portion for defining the cavity portion.

Claim 3 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the heat radiating unit has two openings respectively formed in two side end portions of the cavity portion allowing the air to flow therethrough.

Claim 4 (previously presented): The arc welding control unit as set forth in Claim 3, wherein the box body of the arc welding control unit includes two air flow holes in two side end portions formed in mutually facing surfaces and the heat radiating unit is disposed such that the two openings formed in the two side end portions thereof respectively face the mutually facing surfaces of the box body so that the openings of the heat radiating unit are respectively engaged with the air flow holes of the box body of the arc welding control unit.

Claim 5 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the heat radiating unit mounts the heat generating first electrical element on at least part of the outer peripheral portion defining the cavity portion.

Claim 6 (previously presented): The arc welding control unit as set forth in Claim 5, wherein the heat generating first electrical element includes a heat sink having a heat radiating fin, and the heat radiating fin is exposed to the inside of the cavity portion through which the air flows.

Claim 7 (previously presented): The arc welding control unit as set forth in Claim 3, wherein, in one of the two openings, there is provided a fan for forcing air existing in the cavity portion to flow through the cavity portion.

Claim 8 (previously presented): The arc welding control unit as set forth in Claim 7, wherein the fan is mounted on the opening of the heat radiating unit.

Claim 9 (previously presented): The arc welding control unit as set forth in Claim 7, wherein the fan is mounted on an air flow hole portion formed in the box body for allowing air to flow therethrough.

Claim 10 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the heat radiating unit includes two or more first electrical elements on the outer peripheral portion defining the cavity portion.

Claim 11 (canceled)

Claim 12 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the heat radiating unit includes fans respectively disposed in every cavity portion formed in two or more rows.

Claim 13 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the heat radiating unit allows air of different first electrical elements in every cavity portion to flow.

Claim 14 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the first electrical element includes an electrical element used in an inverter circuit arranged in the arc welding control unit.

Claim 15 (previously presented): The arc welding control unit as set forth in Claim 14, wherein the first electrical element includes a power transistor.

Claim 16 (previously presented): The arc welding control unit as set forth in Claim 1, wherein the first electrical element includes a rectify diode.

Claim 17 (previously presented): The arc welding control unit as set forth in Claim 1, wherein, in the cavity portion, there is disposed a heat generating second electrical element.

Claim 18 (previously presented): The arc welding control unit as set forth in Claim 17, wherein the second electrical element includes a reactor.

Claim 19 (previously presented): The arc welding control unit as set forth in Claim 17, wherein the second electrical element includes a transformer.

Claim 20 (new): The arc welding control unit of Claim 1, wherein the heat radiating unit has at least two openings formed in a first end of the cavity portion allowing the air to flow therethrough, the two openings each having a fan positioned within the opening, the fans being configured to draw air into the housing and through the respective compartments, and wherein one or more dividers are positioned between the openings to separate the respective fans into the substantially individualized compartments such that each compartment includes one of the fans.